

Table of comparative maximum and minimum temperatures for November.

State or Territory.	Station.	For 1885.		Since establishment of station.			
		Max.	Min.	Max.	Year.	Min.	Year.
Alabama	Mobile	75.4	33.3	82.0	1878, 1881	27.0	'71, '76, '80
Do	Montgomery	79.3	31.0	83.0	1879, 1882	21.0	1872
Arizona	Prescott	75.0	20.8	75.0	1878	1.0	1880
Do	Yuma	86.4	41.1	91.0	1879	31.0	1880
Arkansas	Fort Smith	79.9	25.1	86.0	1882	22.0	1882
Do	Little Rock	79.0	28.2	82.0	1879	10.0	1880
California	San Francisco	70.0	50.0	78.0	1871	41.0	1880
Do	San Diego	75.4	41.5	85.0	1873	38.0	1881
Colorado	Denver	75.0	11.2	76.0	1876, 1879	18.0	1877
Do	Pike's Peak	33.2	-9.0	33.0	1878, 1879	-38.0	1880
Connecticut	New Haven	64.8	19.1	71.5	1882	2.0	1875
Do	New London			72.0	1882	4.0	1875
Dakota	Fort Buford	58.0	11.9	62.0	1879	-20.0	1881
Do	Yankton	67.5	18.4	76.0	1876	-15.0	1875
Delaware	Del. Breakwater			73.0	1881	23.0	1880
Do	Cape Henlopen	72.0	27.1				
District of Columbia	Washington City	71.0	29.7	80.0	1879	12.5	1880
Florida	Jacksonville	81.2	36.4	84.0	1875, 1877	30.0	1873
Do	Key West	84.0	56.2	91.0	1876	52.0	1873
Georgia	Augusta	84.9	28.2	83.0	1882	24.0	1873
Do	Savannah	79.5	35.0	82.0	1875	22.0	1872
Idaho	Buñs City			59.0	1879	-7.3	1884
Do	Lewiston	61.8	29.3	63.2	1883	13.0	1880
Illinois	Cairo	75.6	27.7	80.5	1882	7.0	1872
Do	Chicago	66.0	27.6	68.0	1875	-23.0	1872
Indiana	Indianapolis	69.8	23.7	75.0	1879	-5.0	1880
Do	Greencastle	68.9	25.9	66.1	1884	9.7	1884
Indian Territory	Fort Sill	84.0	25.0	83.0	1879	-4.0	1880
Iowa	Des Moines	66.3	21.4	71.0	1874, 1879	-3.0	1875
Do	Keokuk	73.2	22.1	74.0	1874	-3.0	1872
Kansas	Dodge City	75.5	21.2	83.0	1875	-7.0	1880
Do	Leavenworth	75.5	25.0	77.0	1874	0.0	1872
Kentucky	Louisville	72.7	34.0	78.0	1879	4.5	1872
Louisiana	New Orleans	84.7	40.0	82.0	1882	31.5	1881
Do	Shreveport	80.8	31.6	86.0	1882	18.0	1880
Maine	Eastport	57.1	24.2	64.0	1882	-13.0	1875
Do	Portland	55.5	19.9	66.0	1882	-6.0	1875
Maryland	Baltimore	73.5	32.5	78.0	1879	15.0	1880
Massachusetts	Boston	68.8	23.3	75.0	1879	-2.0	1880
Michigan	Alpena	64.2	22.1	63.0	1874	-4.0	1880
Do	Detroit	67.1	28.9	69.0	1879, 1882	0.0	1880
Minnesota	Saint Paul	52.7	17.2	72.0	1874	-24.5	1875
Do	Saint Vincent	40.2	0.7	58.7	1884	-22.0	1880, 1883
Mississippi	Vicksburg	84.8	31.2	84.5	1882	23.0	1877, 1880
Missouri	Saint Louis	76.1	31.8	82.0	1879	8.0	1880
Montana	Fort Benton	68.0	15.9	71.6	1884	-31.0	1875
Do	Helena	60.9	19.8	62.0	1884	-17.0	1880, 1881
Nebraska	Omaha	63.1	21.5	73.8	1882	-6.0	1875
Do	North Platte	63.0	24.3	79.0	1877	-10.0	1877
Nevada	Winnemucca	64.8	13.6	67.0	1879	-9.0	1880
New Hampshire	Mount Washington	51.0	5.8	47.0	1880	-40.0	1875
New Jersey	Atlantic City	64.7	26.8	72.0	1882	10.0	1875
Do	Sandy Hook	72.0	29.9	73.0	1881	6.0	1880
New Mexico	Santa Fé	62.0	20.0	77.0	1878	-11.0	1880
New York	Buffalo	67.5	27.6	68.3	1881	2.5	1875
Do	New York City	68.0	25.0	74.0	1882	7.0	1875
North Carolina	Charlotte	75.7	27.7	80.0	1879	18.0	1880
Do	Wilmington			83.0	1879, 1879	20.0	1872
Ohio	Cleveland	68.3	22.1	72.5	1882	0.0	1880
Do	Cincinnati	70.8	27.1	75.0	1879	5.0	1880
Oregon	Portland	65.0	34.0	68.0	1873	22.5	1883
Do	Roseburg			69.7	1884	17.5	1880
Pennsylvania	Philadelphia	71.0	28.8	77.0	1876	8.0	1875
Do	Pittsburgh	72.0	21.1	79.0	1876	4.0	1880
Rhode Island	Block Island	64.0	31.4				
Do	Newport			71.2	1882	4.0	1875
South Carolina	Charleston	78.4	34.0	82.0	1879	28.0	1873, 1881
Tennessee	Knoxville	73.5	29.3	80.5	1881	11.5	1872
Do	Nashville	72.3	30.0	78.0	1879	13.0	1882
Texas	Galveston	80.3	46.4	82.0	1879	29.0	1880
Do	El Paso	78.3	23.3	82.0	1882	11.0	1880
Utah	Salt Lake City	68.9	17.0	68.0	1875	3.0	1880
Vermont	Burlington			65.8	1882	1.0	1873
Virginia	Lynchburg	71.6	28.3	80.2	1882	13.0	1880
Do	Norfolk	78.1	35.4	79.2	1883	20.0	1872
Washington Ter.	Dayton	67.2	27.2	66.0	1883	5.0	1881
Do	Olympia	59.2	30.8	63.0	1884	21.0	1882
West Virginia	Morgantown			76.0	1881	8.0	1880
Wisconsin	La Crosse	58.0	20.8	70.0	1874	-21.0	1875
Do	Milwaukee			70.0	1874	-14.0	1875
Wyoming	Cheyenne	67.1	15.9	69.0	1876	-20.0	1875

Rio Grande Valley.—Brownsville and Rio Grande City, Texas, 14th.

Tennessee.—2d, 3d, 4th, 9th, 10th, 11th, 13th to 17th, 20th, 21st, 24th, 26th, 27th, 29th.

Ohio Valley.—1st to 4th, 8th to 11th, 13th to 18th, 20th to 30th.

Lower lake region.—1st, 4th, 7th, 8th, 11th, 13th to 17th, 19th to 30th.

Upper lake region.—1st to 30th.

Extreme northwest.—1st to 6th, 8th to 28th, 30th.

Upper Mississippi Valley.—1st to 6th, 8th to 17th, 19th to 30th.

Missouri Valley.—1st to 30th.

Northern slope.—1st to 30th.

Middle slope.—1st to 30th.

Southern slope.—1st, 2d, 10th, 13th, 14th, 16th, 19th, 23d, 24th, 25th, 27th to 30th.

Southern plateau.—4th, 6th, 7th, 8th, 12th to 15th, 17th, 18th, 21st to 30th.

Middle plateau.—1st to 15th, 17th to 28th, 30th.

Northern plateau.—1st, 3d, 4th, 5th, 11th to 16th, 19th, 21st, 22d, 26th, 29th.

North Pacific coast region.—1st to 4th, 6th, 7th, 10th to 15th, 18th to 22d, 26th, 28th.

Middle Pacific coast region.—3d, 5th, 11th to 14th.

South Pacific coast region.—Los Angeles, 12th, 15th.

ICE.

Ice formed in the southern parts of the country as follows:

Alabama.—Greensborough, 14th, 24th, 25th, 26th.

Arkansas.—Lead Hill, 2d, 8th, 13th, 15th, 20th, 25th, 26th; Little Rock, 14th.

California.—Murieta, 2d.

Georgia.—Forsyth, 13th, 14th, 24th, 25th, 26th; Augusta, 3d; Savannah, 25th.

New Jersey.—Clayton, 1st, 14th, 16th, 17th, 20th, 21st, 22d, 28th, 29th; Little Egg Harbor, 28th.

North Carolina.—Weldon, 1st; Raleigh, 26th; Lenoir, 27th; New River Inlet, 4th.

South Carolina.—Stateburg, 3d, 26th; Spartanburg, 25th.

Tennessee.—Ashwood, 3d, 15th, 16th, 25th, 26th, 27th; Nashville, 15th, 26th.

Texas.—Cleburne, 29th; Comfort, 13th, 14th, 28th; Fort Concho, 13th.

Virginia.—Bird's Nest, 1st, 4th, 15th, 17th, 21st.

PRECIPITATION.

[Expressed in inches and hundredths.]

The distribution of rainfall over the United States and Canada for November, 1885, as determined from reports from more than seven hundred stations, is exhibited on chart iii.

In South Carolina, Georgia, and Florida the rainfall has been decidedly below the average, the departures ranging from about 1.50 to 2.50 at all stations, except at Atlanta, Georgia, and Sanford, Florida, where they are 0.69 and 0.61, respectively. There is also an area of deficiency which extends along the northern border of the country from northern New England to Dakota (except over the northern Michigan peninsula, where the rainfall was excessive) in a southwesterly direction to the west Gulf states and Rio Grande Valley. Over the greater part of this extensive area the deficiency exceeded 1.00, and over portions of Illinois, Iowa, Arkansas, Louisiana, and Texas it amounted to more than 2.00. From North Carolina and eastern Tennessee northeastward to southern New England, and in portions of the lower lake region, Ohio Valley, and east Gulf states, the rainfall has been in excess of the average, the departures being most marked over eastern Tennessee, the central Ohio Valley, northeastern Ohio, and at stations along the coasts of New Jersey and North Carolina. In the Rocky Mountain districts and in the Pacific coast regions the rainfall was also above the November average. On the Pacific coast the rainfall was remarkably heavy, numerous stations reporting from ten to nineteen inches. At Red Bluff, California, the amount was 17.05, the average for November during the eight preceding years being 2.20. At Sacramento and San Francisco, California, the departures were also very marked, amounting to 10.17 and 9.26, respectively, and the rainfall at these stations was the largest recorded for any corresponding month since their establishment. At Los Angeles, California, the rainfall was 5.55, or 4.50 above the November average for the last eight years, the aggregate rainfall for November during that period being 7.72, or only 2.17 in excess of that for November, 1885.

DEVIATIONS FROM AVERAGE PRECIPITATION.

The following table shows, for certain stations, as reported

by voluntary observers, the average precipitation for the month of November for a series of years; the precipitation for November, 1885; and the departures from the average:

Station.	County.	Average precipitation for Nov.	Number of years.	Precipitation for November, 1885.	Departure.
		<i>Inches.</i>		<i>Inches.</i>	<i>Inches.</i>
<i>Arkansas.</i>					
Lead Hill	Boone	4.47	4	2.50	-1.97
<i>California.</i>					
Sacramento	Sacramento	2.42	11	9.65	+7.23
<i>Connecticut.</i>					
Hartford	Hartford	3.23	13	5.02	+1.79
Middletown	Middlesex	3.91	27	4.94	+1.03
Wallingford	New Haven	3.87	27	5.05	+1.18
<i>Illinois.</i>					
Anna	Union	4.42	10	1.80	-2.62
Mattoon	Coles	3.78	5	2.20	-1.58
Peoria	Peoria	2.37	30	1.04	-1.33
Riley	McHenry	2.02	25	2.09	+0.07
Sycamore	De Kalb	3.74	4	2.06	-1.68
<i>Indiana.</i>					
Mauzy	Rush	3.60	6	2.35	-1.25
Spiceland	Henry	3.00	25	1.80	-1.20
Vevay	Switzerland	3.16	21	2.46	-0.70
<i>Iowa.</i>					
Creasco	Howard	1.68	10	0.39	-1.29
Monticello	Jones	2.46	32	0.61	-1.85
<i>Kansas.</i>					
Independence	Montgomery	2.07	13	0.58	-1.49
Wellington	Sumner	1.20	7	1.09	-0.11
Yates Centre	Woodson	1.96	5	0.85	-1.12
<i>Maine.</i>					
Gardiner	Kennebec	4.28	47	2.86	-1.42
<i>Maryland.</i>					
Fallston	Harford	3.52	15	4.68	+1.16
<i>Massachusetts.</i>					
Amherst	Hampshire	3.78	51	5.65	+1.87
Cambridge	Middlesex	3.92	45	6.12	+2.20
Fitchburg	Worcester	3.06	21	5.61	+2.55
Framingham	Middlesex	3.93	11	5.98	+2.05
Lake Cochituate	Middlesex	4.53	34	6.11	+1.58
Lowell	Middlesex	3.86	61	4.54	+0.68
New Bedford	Bristol	4.30	73	3.16	-1.14
Springfield	Hampden	3.83	38	5.91	+2.08
Somerset	Bristol	4.45	15	3.00	-1.45
Williamstown	Berkshire	2.61	18	3.97	+1.36
Worcester	Worcester	3.53	44	5.90	+2.37
<i>New Brunswick.</i>					
Saint John	Saint John	5.63	25	5.77	+0.14
<i>New Hampshire.</i>					
Concord	Merrimac	2.97	30	3.74	+0.77
Contoocook	Merrimac	3.25	18	5.40	+2.15
Hanover	Grafton	2.26	18	4.62	+2.36
<i>New Jersey.</i>					
South Orange	Essex	3.40	16	4.10	+0.70
<i>New York.</i>					
North Volney	Oswego	3.56	14	2.95	-0.61
Palermo	Oswego	3.71	32	2.50	-1.21
Plattsburg Barracks	Clinton	1.92	16	4.39	+2.47
<i>Ohio.</i>					
Wauseon	Fulton	3.11	13	2.73	-0.38
<i>Oregon.</i>					
Bandon	Coos	4.56	7	18.21	+13.65
<i>Pennsylvania.</i>					
Dyberry	Wayne	2.89	14	4.41	+1.52
<i>Rhode Island.</i>					
Providence	Providence	4.16	54	3.59	-0.57
<i>South Carolina.</i>					
Stateburg	Sumter	2.87	5	1.45	-1.42
<i>Texas.</i>					
New Ulm	Austin	5.69	14	0.89	-4.80
<i>Vermont.</i>					
Lunenburg	Essex	3.23	38	2.55	-0.68
Newport	Orleans	3.24	10	3.97	+0.73
Stratford	Orange	3.46	11	4.30	+0.84
Woodstock	Windsor	3.12	17	4.53	+1.41
<i>Virginia.</i>					
Bird's Nest	Northampton	2.22	16	5.80	+3.58
Dale Enterprise	Rockingham	1.75	5	4.05	+2.30
Variety Mills	Nelson	2.08	7	2.85	+0.77
Wytheville	Wythe	2.62	21	2.56	-0.06
<i>West Virginia.</i>					
Helvetia	Randolph	4.38	9	4.06	-0.32

* From the "Bulletin of the New England Meteorological Society."

The following notes, in connection with this subject, are reported by voluntary observers:

Arkansas.—Lead Hill, Boone county: the rainfall for autumn, 1885, has only amounted to 7.36, being 9.10 below the autumn average for the past four years.

California.—Princeton, Colusa county: the rainfall for November, 7.21, is the largest ever recorded for that month at this place.

Illinois.—Riley, McHenry county: the total precipitation, 8.52, for autumn of 1885, is 0.09 less than the normal for twenty-four autumns.

Iowa.—Monticello, Jones county: the maximum precipitation for November for the last thirty-two years occurred in 1879, amounting to 5.29, and the minimum, 0.61, in 1885.

Kansas.—Yates Centre, Woodson county: the rainfall for autumn, 1885, is 10.83, or 1.44 above the normal for the past five years.

Maryland.—Fallston, Harford county: greatest precipitation for November for a period of fifteen years, 10.27, in 1877; least, 0.45, in 1882.

New Jersey.—South Orange, Essex county: the precipitation for November, 4.10, was only exceeded in 1878.

Moorestown: the mean precipitation for the three autumn months, 7.82, is 2.66 less than the mean for twenty years.

New York.—North Volney, Oswego county: the precipitation for November, 2.95, is 0.61 below the mean for fourteen years, the extremes being 5.65, in November, 1880, and 1.45 in November, 1882.

Palermo, Oswego county: the precipitation for autumn, 1885, is 9.62; the extremes for a period of twenty-five years being 18.20 for the autumn of 1866, and 3.10 for the autumn of 1882.

Ohio.—Wauseon, Fulton county: the precipitation for November is 0.38 below the average for thirteen years; the extremes for this period being 5.83, in November, 1881, and 1.46, in November, 1884.

Oregon.—Bandon, Coos county: the rainfall this month, 18.21, was unprecedented; the highest recorded for any November for the past seven years being 7.73, in 1879.

Texas.—New Ulm, Austin county: the precipitation for November, 0.89, is 4.80 below the average for fourteen years; the extremes being 14.93 and 0.78.

Vermont.—Woodstock, Windsor county: the rainfall for November, 4.53, is 1.41 above the mean for seventeen years; the largest rainfall in that period was 4.95, in November, 1877, and the smallest, 0.61, in 1882.

Virginia.—Wytheville, Wythe county: the rainfall for the year is still deficient, being 6.82 below the amount due to date.

In the following table are shown, for the several geographical districts, the normal November precipitation for a series of years; the average for November, 1885, and the excess or deficiency as compared with the normal:

Average precipitation for November.

Districts.	Average for November, Signal-Service observations.		Comparison of Nov., 1885, with the average for several years.
	For several years.	For 1885.	
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>
New England	4.49	4.07	-0.42
Middle Atlantic States	3.08	4.64	+1.56
South Atlantic States	3.92	2.88	-1.04
Florida Peninsula	2.09	0.63	-1.46
Eastern Gulf States	4.70	5.19	+0.49
Western Gulf States	4.61	2.55	-2.06
Rio Grande Valley	1.70	0.16	-1.54
Tennessee	4.30	4.58	+0.28
Ohio Valley	3.40	3.28	-0.12
Lower lake region	3.16	3.18	+0.02
Upper lake region	2.78	2.47	-0.31
Extreme northwest	0.78	0.78	0.00
Upper Mississippi Valley	2.62	1.16	-1.46
Missouri Valley	0.87	1.28	+0.41
Northern slope	0.64	0.64	0.00
Middle slope	0.56	0.87	+0.31
Southern slope	1.28	0.64	-0.64
Southern plateau	0.53	1.23	+0.70
Middle plateau	0.98	3.44	+2.46
Northern plateau	1.92	3.59	+1.67
North Pacific coast region	7.20	9.35	+2.15
Middle Pacific coast region	1.82	11.88	+10.06
South Pacific coast region	0.55	2.94	+2.39

SNOW.

The dates on which snow fell in the various districts are as follows:

New England.—2d, 3d, 4th, 9th, 10th, 15th, 18th, 19th, 21st to 26th, 29th, 30th.

Middle Atlantic states.—1st, 2d, 3d, 14th, 15th, 16th, 19th, 21st to 27th, 29th.

South Atlantic states.—20th, 23d, 24th, 25th.

East Gulf states.—Atlanta, Georgia, 25th.

Tennessee.—24th, 25th.

Table of excessive and greatest monthly precipitation for November, 1885.

Station.	Specially heavy.		Largest monthly.	Station.	Specially heavy.		Largest monthly.
	Date.	Amt.			Date.	Amt.	
<i>Alabama.</i>				<i>Louisiana—Cont'd</i>			
Marion.....	6, 7	7.00	7.90	Point Pleasant...	26	2.03	
Greensborough.....	6, 7	6.00	7.32	Luling.....	5, 6	4.00	
Mt. Vernon B'cks.....	7	2.70		Shreveport.....	4	2.44	
Auburn.....	7	2.29		<i>Maine.</i>			
Centre.....	7	2.00		Orono.....	9	2.68	
Florence.....	6	3.31		<i>Maryland.</i>			
Gadsden.....	6, 7	3.50		Woodstock.....	7, 8	2.34	
Mount View.....	6	2.25		<i>Massachusetts.</i>			
Prattville.....	7	2.00		Cambridge b.....			9.20
Tuscaloosa.....	6, 7	3.86		Northampton.....			6.99
Tusculum.....	6, 7	2.33		Princeton.....	9	2.63	6.69
<i>Arkansas.</i>				Chicopee.....			6.66
Mount Ida.....	4, 5	3.05		Newburyport.....			6.59
<i>California.</i>				Chestnut Hill.....			6.42
Delta.....			29.31	Mystic Lake.....			6.34
Fort Gaston.....	1 to 9	13.39	24.54	Milrose.....			6.33
Do.....	28, 29	4.03		Winchester.....			6.28
Emigrant Gap.....			18.69	Waltham.....			6.24
Hydesville.....	7, 8, 9	3.89	18.37	Westborough.....			6.14
Do.....	17	2.06		Medford.....			6.13
Do.....	24, 25	2.30		Holyoke.....			6.13
Do.....	28, 29	2.52		Leicester.....			6.13
Red Bluff.....	16, 17	3.52	17.05	Beverly Farm.....			6.12
Do.....	24	2.32		Cambridge a.....			6.12
Cisco.....			17.05	Milton.....	2	2.00	6.10
Callistoga.....			15.67	Do.....	20	3.07	
Colfax.....			15.48	Deerfield.....	1, 2	2.65	6.09
San Rafael.....	10	2.20	15.24	Mystic Station.....			6.09
Do.....	15, 16	3.83		Boston.....	24, 25, 26	2.86	
Do.....	24, 25	2.59		Amherst a.....	1, 2	2.08	
Auburn.....			15.24	Do.....	6 to 9	2.80	
Towles.....			14.40	Rowe.....	1, 2	2.30	
Summit.....			13.60	Amherst b.....	6 to 9	2.93	
San Luis Obispo.....	17, 18	10.04	12.90	<i>Missouri.</i>			
Bedding.....			11.90	Pierce City.....	5, 6	2.00	
San Francisco.....	24	2.58	11.78	<i>Nevada.</i>			
Angel Island.....	16, 17	2.57	11.57	Carson City.....	17, 18	3.21	
Do.....	24	2.04		<i>New Hampshire.</i>			
Sacramento.....	15 to 18	6.40	11.34	Mountainville.....			6.67
Petaluma.....			11.33	Do.....			6.50
Oroville.....	16 to 19	4.34	11.27	Do.....			6.49
Do.....	24	2.34		<i>New Jersey.</i>			
Oakland.....	15, 16, 17	3.10	11.11	Dover.....	8, 9	3.60	7.90
Do.....	24	3.04		Do.....	24	2.10	
Aptos.....			10.65	Atlantic City.....	8, 9	3.88	6.84
Dunnigan.....			10.47	Little Egg Harb.....	8, 9	2.08	6.05
Tehama.....			10.42	Do.....	23, 24	2.02	
Suisun.....			10.38	<i>New York.</i>			
Santa Cruz.....			10.25	Setauket.....	2	3.80	8.16
Alcatraz Island.....	15, 16, 17	2.76	10.04	Do.....	23, 24	2.55	
Orland.....			9.41	Mountainville.....	1, 2	2.03	6.22
New Hall.....			9.01	Do.....	8, 9	2.00	
Chico.....			8.99	North Volney.....	18, 19	2.20	
College City.....	16, 17	2.59	8.85	<i>North Carolina.</i>			
Niles.....			8.78	Reidsville.....	7, 8	5.00	8.40
Benicia Barracks.....			8.75	Do.....	28, 29	3.30	6.29
Borden.....			8.60	Lincolnton.....			
Fort Bidwell.....			8.62	Lenoir.....	5 to 8	4.30	
Napa.....			8.51	Statesville.....	6, 7	2.60	
Yone.....			8.45	<i>Oregon.</i>			
Marysville.....			8.20	Bandon.....	1 to 6	6.73	18.21
Lemoore.....			8.10	Do.....	8, 9	4.73	
Martinez.....			8.08	Do.....	23, 24	2.59	
Knight's Landing.....			8.00	Astoria.....			12.45
San Fernando.....			7.94	Portland.....	7	3.10	8.58
Fresno.....			7.92	Albany.....	3 to 8	4.51	8.40
Pajaro.....			7.91	Ashland.....	7, 8	3.07	8.02
Davisville.....			7.87	Eola.....			7.36
South Vallejo.....			7.87	Fort Klamath.....			7.29
Brighton.....			7.76	<i>Pennsylvania.</i>			
Cahuenga Valley.....	19	2.66	7.39	Mahanoy Plane.....	1, 2	2.12	6.78
Cape Mendocino.....			7.34	Catawissa.....	23, 24	2.36	
Pleasanton.....			7.33	<i>Rhode Island.</i>			
Willows.....			7.28	Block Island.....	23, 24	2.64	
Santa Monica.....			7.20	<i>South Carolina.</i>			
Farmington.....			6.95	Spartanburg.....	6	2.00	
Truckee.....			6.95	<i>Tennessee.</i>			
Chualar.....			6.90	Andersonville.....	7	3.00	6.75
San Mateo.....			6.88	Chattanooga.....	6, 7	3.54	6.18
Gilroy.....			6.77	Knoxville.....	6, 7	3.93	6.15
Byron.....			6.70	Caryville.....	7	3.12	
Monterey.....			6.65	Parkeville.....	7	2.07	
Turlock.....			6.63	Grief.....	7	3.28	
Salinas.....	17, 18	2.80	6.60	Farmingdale.....	7	3.17	
Williams.....			6.51	Forstoria.....	5, 6	4.00	
Lathrop.....			6.46	Cookville.....	6, 7	2.03	
Athlone.....			6.43	Clements ville.....	6	2.00	
Brentwood.....			6.40	Manchester.....	6	2.40	
Menlo Park.....			6.22	Beech Grove.....	6, 7	2.11	
Salidad.....			6.22	Riddleton.....	6, 7	2.88	
Livermore.....			6.20	Florence Station.....	6, 7	2.01	
<i>Connecticut.</i>				Hohenwald.....	5, 6	2.32	
Shelton.....			6.73	Waynesborough.....	7	2.20	
Bethel.....	1, 2, 3	3.25	6.50	Lexington.....	5, 6	2.00	
Collinsville.....			6.41	<i>Texas.</i>			
<i>Dakota.</i>				Palestine.....	3, 4	2.60	
Yankton.....	5, 6	2.18		Indianola.....	26, 27	2.64	
<i>Florida.</i>				<i>Vermont.</i>			
Pensacola.....	5 to 8	7.53	11.07	Townshend.....			7.24
Do.....	27, 28	3.21		Jacksonville.....			6.16
Tallahassee.....	23	2.00		Brattleborough.....	2	2.04	
<i>Kentucky.</i>				<i>Virginia.</i>			
Louisville.....			6.17	Chincoteague.....	8	2.39	6.95
<i>Louisiana.</i>				Do.....	29, 30	2.22	
Point Pleasant.....	6, 7	3.10	6.97	Fort Monroe.....	8, 9	2.20	

Table of excessive and greatest monthly precipitation for November, 1885—Con.

Station.	Specially heavy.		Largest monthly.	Station.	Specially heavy.		Largest monthly.
	Date.	Amt.			Date.	Amt.	
<i>Virginia—Cont'd</i>				<i>Wash. Ter.—Con.</i>			
Dale Enterprise.....	7, 8	3.00		Fort Canby.....	8, 9	2.31	13.72
<i>Washington Ter.</i>				Pysht.....	7	2.44	13.07
Neah Bay.....	1 to 7	6.90	19.60	Do.....	13	2.63	
Do.....	11 to 14	4.90		Olympia.....	4, 5	3.12	10.18
Tatoosh Island.....	7, 8	2.86	19.25	Tacoma.....	5, 6, 7	3.33	8.22

Ohio Valley.—1st to 4th, 14th, 15th, 21st to 28th.

Lower lake region.—1st to 4th, 14th, 15th, 16th, 18th, 19th, 21st to 28th.

Upper lake region.—1st to 8th, 10th to 16th, 20th to 30th.

Extreme northwest.—1st, 3d to 9th, 11th to 14th, 18th, 19th, 20th, 24th, 28th, 29th, 30th.

Upper Mississippi Valley.—1st, 7th, 12th, 13th, 23d, 24th, 27th, 29th, 30th.

Missouri Valley.—5th, 6th, 7th, 11th, 12th, 18th, 19th, 27th, 29th, 30th.

Northern slope.—4th, 5th, 6th, 10th, 11th, 23d, 25th, 26th, 29th.

Middle slope.—4th, 5th, 6th, 11th, 12th, 25th to 28th.

Southern plateau.—Santa Fé, 5th, 20th, 26th; Fort Wingate, 26th.

Middle plateau.—4th to 7th, 10th, 11th, 12th, 16th, 20th, 23d, 25th, 26th, 29th.

Northern plateau.—Fort Spokane, Washington Territory, 5th, 6th; Spokane Falls, Washington Territory, 6th.

North Pacific coast region.—1st to 7th, 9th, 21st to 26th.

Middle Pacific coast region.—1st, 2d, 4th, 5th, 6th, 11th, 23d, 27th, 28th, 29th.

South Pacific coast region.—Los Angeles, California, 23d, 30th.

LARGEST MONTHLY SNOWFALLS.

Monthly snowfalls of two inches or more were reported from the various states and territories during the month, as follows:

California.—Summit, 136; Cisco, 76.5; Emigrant Gap, 36; Truckee, 34; Boca, 13; Susanville, 3.

Colorado.—Pike's Peak, 6.4; West Las Animas, 2.5.

Connecticut.—North Colebrook, 13; Bethel, 12; Norfolk, 10; Hartford, 7; Collinsville, 6.5; Wallingford, 5.

Dakota.—Webster, 8.7; Fort Bennett, 8.5; Fort Totten, 8.4; Bismarck, 6.4; Deadwood and Fort Buford, 4.7.

Indiana.—Logansport, 3; La Grange, 2.5.

Maine.—Portland, 8; Bridgeton, 6.5.

Maryland.—Woodstock, 2.

Massachusetts.—Rowe, 12.5; Fitchburg b, 10.5; Concord, 10.2; Leominster and Gilbertville, 9; Worcester, 8.4; Princeton, 8; Lawrence, 7; Fitchburg a, 6; Lowell and Westvale, 5.5; Northfield, 5.3; Beverly, 5.2; Newburyport, 4.5; Dudley, Leicester, and Westborough, 4; Springfield, 3.5; Fall River, 3; Blue Hill, Granton, Milton, and Taunton, 2.

Michigan.—Traverse City, 11.5; Alpena, 8.2; Mackinaw City, 6.5; Manistique, 6; Marquette, 5.8; Harrisonville, 4.8; Lansing, 4.1; Escanaba, 3.6; Port Huron, 3.1; Thornville and Hudson, 2.5.

Minnesota.—Saint Vincent, 12.9; Duluth, 6.8; Moorhead, 4.3.

Nebraska.—North Platte, 4.2.

Nevada.—Carson City and Toano, 9.5; Halleck, 5.5; Carlin and Elko, 3; Reno, 2.5; Palisade and Tacoma, 2.

New Hampshire.—Hanover, 17; Mount Washington, 11; Antrim, 9; Warner, 8.5; Concord, 6; Nashua, 6; Walpole, 5.5; Manchester a, 4; Manchester b, 3.2.

New Jersey.—Dover, 6; Readington, 2.

New York.—Mountainville, 24; Humphrey, 23; Ithaca, 18.8; Factoryville, 15; Syracuse, 14; Penn Yan and Oswego, 8.5; Rochester, 8.2; Palermo, 6; Albany, 5.9; Buffalo, 5.4; Auburn, Cooperstown, and Menand Station, 5; White Plains, 2.

Ohio.—New Alexandria, 11.5; Hiram, 10; Cleveland, 9; Ruggles, 8; Granville, 6; Garrettsville, 5.8; McConnellsville and Sidney, 5.5; Dayton, North Lewisburg, and Oberlin, 5;

Yellow Springs, 4.5; Jacksonborough, 3.5; Upper Sandusky, 2.8; New Bremen, 2.1; Toledo, 2.

Pennsylvania.—Drifton, 27.5; Troy, 27; Mahanoy Plane, 24; Grampian Hills, 23; Wellsborough, 22.2; Wilkesbarre, 18.2; Dyberry, Catawissa, and Blooming Grove, 18; Erie, 15.5; South Bethlehem and Wysox, 10; Quakertown a, 5; Quakertown b, 4; Easton, 3.5; Pittsburg, 2.4.

Utah.—Salt Lake City, 10.4; Ogden, 4; Frisco, 2.5.

Vermont.—Post Mills, 20; Chelsea, 19.8; Strafford, 18; Woodstock, 17.2; Marlborough, 17; Burlington, 16; Jacksonville, 13; Brattleborough, 10.2; Windsor and Charlotte, 9; Townshend, 7; Vernon, 5; Newport, 3.9; Dorset, 2.2; Lunenburg, 2.

West Virginia.—Helvetia, 15.

Wyoming.—Cheyenne, 4.5.

Wisconsin.—Wausau, 2.5.

DEPTH OF UNMELTED SNOW ON GROUND AT END OF MONTH.

[Expressed in inches and tenths.]

Colorado.—Pike's Peak, trace.

Dakota.—Fort Totten, 2.

Maine.—Portland, 4.

Massachusetts.—Mendon, 0.8; Somerset, trace.

Michigan.—Port Huron, 1.2; Marquette, 0.2.

Minnesota.—Saint Vincent, 3; Moorhead, 0.3.

New Hampshire.—Mount Washington, 3; Nashua, 1.

New Jersey.—Dover, trace.

New York.—Mountainville, 7.8; Factoryville and Ithaca, 6; Syracuse, 3; Albany, Rochester, Palermo, and Auburn, 2; Menand Station, 1.5; Oswego and Cooperstown, trace.

Ohio.—Hiram, 2; Garrettsville, 1; Yellow Springs, trace.

Pennsylvania.—Wellsborough, 14.1; Drifton, 14; Blooming Grove, 11; Troy, 9; Dyberry, 8; Grampian Hills, 7; Mahanoy Plane and Catawissa, 6; Wysox, 5; Wilkesbarre, 4.5; Quakertown, 1.

Vermont.—Post Mills, 16; Woodstock, 13; Strafford, 10; Charlotte and Burlington, 6; Brattleborough, 3; Newport, 2; Dorset, trace.

West Virginia.—Helvetia, 3.

Wisconsin.—Wausau, 2.5.

HAIL.

Augusta, Georgia: hail fell on the 6th, three quarters of an inch in diameter, breaking a number of windows.

Cairo, Illinois: hail fell on the 1st, the size of peas, and at two miles east of this station the hail-stones were the size of grapes.

Astoria, Oregon: hail, of considerable size, fell on the 4th.

Tatoosh Island, Washington Territory, 8th: heavy thunder and lightning, accompanied by hail, which fell to the depth of one-half an inch, the ground being completely covered, and from a distance looked as if covered with snow; the hail-stones were one-half inch in diameter.

Hail storms, of which no particulars were reported, occurred in the various states and territories, as follows:

Alabama.—Birmingham, 1st.

Arkansas.—Little Rock, 18th.

California.—Fort Bidwell, 2d; College City, 10th.

Colorado.—Montrose, 11th.

Connecticut.—North Colebrook, 1st, 21st; Voluntown, 2d; New Haven, 24th.

Georgia.—Augusta, 6th; Savannah, 19th.

Illinois.—Anna, 15th.

Louisiana.—Liberty Hill, 6th; Grand Coteau, 9th.

Maine.—Buckfield, 3d, 18th, 20th.

Michigan.—Saginaw, 2d; Grand Haven, 2d, 3d; Pentwater, 2d, 13th.

Nevada.—Fort McDermitt, 2d.

New Jersey.—Dover, 3d, 22d, 26th; Somerville, 3d, 24th, 29th; Sandy Hook, 29th.

New York.—Setauket, 3d, 26th.

North Carolina.—New River Inlet, 19th.

Oregon.—Astoria, 2d; Albany, 4th; Bandon, 22d.

South Carolina.—Spartanburg, 6th.

Tennessee.—Milan, 6th.

Washington Territory.—Tatoosh Island, 2d, 5th, 10th; Pysht, 5th, 26th.

Wisconsin.—Embarras, 18th.

SLEET.

Arizona.—Prescott, 3d.

Colorado.—Pike's Peak, 20th, 21st.

Connecticut.—Bethel, 3d.

Dakota.—Bismarck, 3d, 23d; Fort Sully, 5th; Huron, 6th, 7th.

Illinois.—Bloomington, 20th, 22d.

Indiana.—Indianapolis, 21st; Greencastle, 22d.

Indian Territory.—Fort Supply, 23d.

Iowa.—Davenport, 8th.

Maine.—Portland, 3d; Eastport, 10th, 11th.

Massachusetts.—Boston, 22d; New Bedford, 26th.

Michigan.—Grand Haven, 1st, 2d, 3d, 15th, 21st; Escanaba, 1st, 4th, 12th, 20th, 28th.

Minnesota.—Saint Vincent, 27th, 28th.

Nebraska.—North Platte, 24th.

Nevada.—Winnemucca, 22d.

New Hampshire.—Mount Washington, 2d.

New Jersey.—Beverly, 23d, 25th, 29th; Princeton, 29th.

New York.—Oswego, 3d, 15th, 16th, 25th; Auburn, 21st; New York City, 29th.

Ohio.—Cleveland, 2d, 3d, 23d, 25th, 26th; Columbus and Cincinnati, 22d.

Pennsylvania.—Chambersburg, 1st, 3d; Erie, 2d, 3d, 13th, 21st, 22d; Philadelphia, 23d, 24th, 29th.

TEMPERATURE OF WATER.

The following table shows the highest and lowest temperatures of water observed at the several stations; the monthly ranges of water temperature; the average depth at which the observations were made; and the mean temperature of the air:

Temperature of water for November, 1885.

Station.	Temperature at bottom.		Range.	Average depth, feet and tenths.	Mean temperature of the air at station.
	Max.	Min.			
Atlantic City, New Jersey	57.7	45.4	12.3	11.3	50.7
Alpena, Michigan	49.5	32.4	17.1	12.7	39.2
Augusta, Georgia	60.0	47.0	13.0	10.2	63.8
Baltimore, Maryland	57.3	46.3	11.0	9.8	50.5
Block Island, Rhode Island	55.0	44.9	10.7	8.4	49.2
Boston, Massachusetts	49.3	39.2	10.1	20.9	47.3
Buffalo, New York	45.0	36.0	9.0	10.6	42.3
Canby, Fort, Washington Territory	55.8	49.3	6.5	16.5	50.6
Cedar Keys, Florida	72.9	59.9	16.0	7.9	66.0
Charleston, South Carolina	64.6	53.8	10.8	42.1	64.6
Chicago, Illinois	48.5	37.8	10.7	8.6	44.9
Chincoteague, Virginia	62.8	42.7	20.1	3.6	52.1
Cleveland, Ohio	52.8	38.5	14.3	14.0	43.3
Detroit, Michigan	46.7	39.5	7.2	25.2	44.1
Duluth, Minnesota	44.7	39.3	5.2	10.2	35.1
Eastport, Maine	49.1	44.8	4.3	16.8	42.1
Escanaba, Michigan	47.1	36.2	10.9	17.9	37.4
Galveston, Texas	76.0	58.7	17.3	12.7	66.0
Grand Haven, Michigan	45.9	35.9	10.0	19.0	40.7
Indianola, Texas	53.5	60.5	23.0	8.2	70.9
Jacksonville, Florida	58.4	58.4	10.0	18.0	68.9
Key West, Florida	80.0	70.0	10.0	17.4	74.6
Mackinaw City, Michigan	45.9	38.6	7.3	10.0	38.7
Macon, Fort, North Carolina	68.5	54.6	13.9	9.9	60.0
Marquette, Michigan	42.9	37.3	5.6	12.9	35.7
Milwaukee, Wisconsin	49.7	40.6	9.1	8.0	39.6
Mobile, Alabama	54.6	53.4	11.2	15.8	63.3
New Haven, Connecticut	54.0	40.6	13.4	16.2	48.2
New London, Connecticut	55.4	44.2	11.2	18.2	49.3
New York City	58.4	45.9	12.5	16.9	57.2
Pensacola, Florida	67.5	54.0	13.5	17.5	63.5
Portland, Maine	48.4	40.0	8.4	17.2	42.8
Portland, Oregon	53.9	44.8	9.1	51.3	49.4
Sandusky, Ohio	49.0	36.0	13.0	11.4	44.9
Sandy Hook, New Jersey	59.7	45.0	14.7	2.2	50.5
San Francisco, California	59.2	55.9	3.3	38.8	58.2
Savannah, Georgia	61.0	50.2	10.8	10.6	65.2
Smithville, North Carolina	67.1	55.0	12.1	11.0	60.4
Toledo, Ohio	49.2	35.9	13.3	13.2	45.0
Wilmington, North Carolina					

• Record for fourteen days.

WINDS.

The most frequent directions of the wind during November,